AMENDMENTS TO THE SPECIFICATION

Please delete the paragraph on page 2 beginning with "[t]his object is achieved …."

Please amend the paragraph that begins on page 3, line 29 as follows:

Alternatively, the difference in the imaging methods can also lie in the fact, that the images with the same modality are generated in different imaging conditions (see Fig. 2). For example the first image can be a preoperative X-ray image with a contrast means dose, while the second image is an X-ray image without contrast means.

Please amend the paragraph that begins on page 5, line 22 as follows:

In the following, the invention is elucidated by way of example with the help of the appended Figs. 1 and 2. ~~The sole~~ Fig. 1 schematically depicts the usage of a data processing device according to the invention for registration of CT images and ultrasound images. Fig. 2 depicts usage of a data processing device for registration of images with the same modality.

Please amend the paragraph that beings on page 5, line 29 as follows:

In the left portion of ~~the~~ Fig. 1 is a diagrammatic representation of the situation with a medical operation on a patient 3. To prepare for the operation, three-dimensional X-ray images A are taken of the operation area with a CT unit 1 and stored in a data processing device 10 (workstation). The data processing device 10 can be arranged for considering positions measured with the help of a position-measuring apparatus (e.g., part of the data processing device 10) or a calibration of the images during the registration. The data processing device 10 can perform a process that includes generating the first transformed image, generating the second transformed image, and registering the first transformed image and the second transformed image. The data processing device 10 can repeat generating the first transformed image, generating the second transformed image, and registering the first transformed image and the second transformed image at least a second time with variation of at least one of the transformed images, in order to maximize a degree of similarity between the transformed images.

Please amend the paragraph that beings on page 7, line 22 as follows:

Through a position measuring system and/or a calibration procedure of the relevant imaging modalities, suitable start values for the optimizing process explained above could further be generated automatically. With reference to this, ~~the~~ Fig. 1 represents as an example an electromagnetic localization system with a magnetic field probe 4 on the patient's body and a field generator 5, which send their measuring data through the spatial position of the patient to the registration module 11. Naturally other devices like for example optical localization systems are also usable for this purpose. From a calibration of the imaging apparatus (X-ray, ultrasound) it can be further known, which pixel and voxel respectively belongs to which space point in relation to the apparatus, or in other words how the generated image is positioned in a coordinate system relating to the apparatus. If further the space position of the image device is known, then the absolute space position of a pixel can be concluded. Further, if it is the case for many or all image devices, then as an end step of the calibration, the device-related coordinate system can be transformed into each other. In this way a pre-selection of the two-dimensional test image generated in step 2 can be made.